

Message Text

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ACTION EB-08

INFO OCT-01 EUR-12 ISO-00 DODE-00 NSAE-00 ICA-11
TRSE-00 SOE-02 DOE-15 CIAE-00 COME-00 /049 W
-----040325 071458Z /45
P 071410Z APR 78
FM AMEMBASSY PARIS
TO SECSTATE WASHDC PRIORITY 9752

C O N F I D E N T I A L SECTION 01 OF 02 PARIS 11518

USOECD

EXCON

E.O. 11652: XGDS1
TAGS: ESTC, COCOM, US, UR
SUBJ: U.S. EPITAXIAL REACTORS FOR THE MANUFACTURE OF
LIGHT EMITTING DIODES TO USSR - IL1355

REF: A) COCOM DOC. (77) 887, B) STATE 5495

1. GERMAN DEL CONTINUED HIS RESERVE ON REFCASE APRIL 5
AND POSED THE FOLLOWING ADDITIONAL COMMENTS AND QUES-
TIONS:

"A. THE DIFFICULTIES WHICH STAND IN THE WAY OF A
CONSTRUCTIVE CONVERSION OF THE LED REACTORS IN-
TO SILICON EXPITAXIAL REACTORS HAVE BEEN FULLY
EXPLAINED. ACCORDING TO WESTERN ECONOMIC STAN-
DARDS, SUCH CONVERSION APPEARS, THEREFORE, TO
BE UNLIKELY. SUCH ECONOMIC CONSIDERATIONS,
HOWEVER, PLAY NO ROLE FOR THE USSR, AS LONG AS
THEY COME INTO POSSESSION OF A TECHNOLOGY WHICH
THEY COULD NOT OBTAIN IN THE NORMAL WAY. IT IS
WELL KNOWN THAT THE SOVIETS ENCOUNTER GREAT
DIFFICULTIES IN CONVERTING RESEARCH RESULTS IN-
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TO LARGE SCALE TECHNICAL PRODUCTION.

1. OF WHAT IMPORTANCE MUST THE TRANSFER OF
STRATEGICALLY USEFUL PRODUCTION KNOW-HOW BE
ESTIMATED WHICH IS CAUSED BY THE EXPORT
OF THE HARDWARE?

2. APART FROM THE HARDWARE, WHAT IS THE EXTENT TO WHICH TECHNICAL KNOW-HOW ACCORDING TO ADMINISTRATIVE PRINCIPLE 5 IS EXPORTED (INCLUDING THE KNOW-HOW TRANSMITTED ON THE SPOT BY MAINTENANCE SPECIALISTS)?

3. OR IS THE USSR ALREADY SUFFICIENTLY EQUIPPED WITH SILICON EPITAXIAL REACTORS OF THEIR OWN PRODUCTION?

B. IN DOCUMENT (77) 887, PARAGRAPH 6 (D)
IT IS ADMITTED THAT THE LED REACTORS CAN BE RECONFIGURED TO MANUFACTURE MICROWAVE DEVICES WITHOUT MAJOR MODIFICATION, BUT THAT THE SOVIET UNION'S NON-MILITARY NEED FOR THIS EQUIPMENT IS GENUINE. DO THE UNITED STATES AUTHORITIES THINK THAT THERE IS NO MILITARY NEED FOR THIS EQUIPMENT?
THE GERMAN AUTHORITIES ARE NOT AT ALL CONVINCED THAT THE MANUFACTURE OF MICROWAVE DEVICES CAN BE PREVENTED BY THE PERIODICAL MACHINE SERVICING ALONG (SEE (77) 887.3 PARAGRAPH 10).

FOR WHAT REASONS SHOULD ALL THAT HAS BEEN SAID IN US ANSWERS WITH REGARD TO THE MANUFACTURE OR NON-

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TO SECSTATE WASHDC PRIORITY 9753

C O N F I D E N T I A L SECTION 02 OF 02 PARIS 11518

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MANUFACTURE OF MICROWAVE DEVICES, ALSO BE VALID FOR VARACTOR DIODES, JUNCTION LASERS, SENSORY ELEMENTS FOR GUIDED WEAPONS, DELAY LINES AND INFRARED

DETECTORS?

C. IT IS SURPRISING THAT TWO OF THE THREE REACTORS TO BE EXPORTED ARE LAID OUT FOR THE STRATEGICALLY MORE IMPORTANT GALLIUM ARSENIDE PHOSPHIDE.

WHAT ARE THE REASONS WHICH JUSTIFY THE NEED FOR THE TOTAL OF 3 REACTORS AND FOR THE RELATION OF 2 AMG-500 REACTORS TO 1 AMG-500 C REACTOR?

D. 1. IS IT POSSIBLE TO PRODUCE, WITH THESE REACTORS, BASIC MATERIAL FOR INFRARED DIODES AND OR MATERIAL FOR LED'S WITH COHERENT LIGHT? IF THIS IS NOT POSSIBLE, FOR WHAT REASONS IS IT EXCLUDED?

2. WHAT NUMBER OF LED'S IS TO BE PRODUCED ANNUALLY WITH THE THREE REACTORS?

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3. FOR WHAT PERIOD OF TIME WILL THE MAINTENANCE CONTRACT BE CONCLUDED.

ARE THE CONTROLS WHICH ARE TO BE CARRIED OUT EVERY SIX MONTHS, STRICTLY MANDATORY OR WILL THEY BE CARRIED OUT WHENEVER THE CONSIGNEE HAS A NEED FOR THEM?"
SALZMAN

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